

Claims

1. (currently amended) An optical filter for viewing an object, comprising an optically ~~absorptive~~ absorptive lens having a spectral transmittance that includes an object-contrast spectral window and a background spectral window.

2. (canceled)

3. (previously presented) The filter of claim 1, wherein the background spectral window is a wavelength range from about 620 nm to about 700 nm.

4. (previously presented) The filter of claim 1, wherein the object-contrast spectral window is a wavelength range of from about 420 nm to 520 nm.

5. (original) The filter of claim 1, wherein the background window corresponds to at least a portion of a spectral reflectance of vegetation.

6. (original) The filter of claim 1, wherein the object-contrast window corresponds to a wavelength-conversion spectrum of light produced by the object.

7. (original) The filter of claim 6, wherein the background spectral window is a wavelength range of from about 530 nm to about 570 nm.

8. (original) The filter of claim 7, wherein the filter includes a spectral-width window.

9. (original) The filter of claim 7, wherein the spectral-width window includes wavelengths greater than about 610 nm.

10. (previously presented) An optical filter comprising an optically absorptive lens having a first spectral window selected to preferentially transmit light from an object and a second spectral window selected to preferentially transmit light from a background.

11. (original) The optical filter of claim 10, wherein the first spectral window is selected to transmit wavelength-converted light from the object.

12. (original) The optical filter of claim 10, wherein the first spectral window is selected to transmit light reflected by the object.

13. (previously presented) Eyewear for viewing of an object with respect to a background, comprising:

a frame; and

at least one optically absorptive lens configured to be placed with respect to a wearer's eyes so that the wearer looks through the lens, the lens defining a spectral transmittance having an object-contrast spectral window and a background spectral window.

14. (currently amended) The eyewear of claim ~~10~~ 13, wherein the background spectral window corresponds to a wavelength range in which the background is reflective.

15. (currently amended) The eyewear of claim ~~10~~ 13, wherein the background spectral window corresponds to a reflectance spectrum of vegetation.

16. (currently amended) The eyewear of claim ~~10~~ 13, wherein the object-contrast window corresponds to a spectrum of wavelength-converted light produced by the object.

17. (currently amended) The eyewear of claim ~~10~~ 13, wherein the lens defines a spectral-width window.

18-20. (canceled)

21. (previously presented) Activity-specific eyewear, comprising:

a lens having a spectral transmittance that includes a background spectral window that transmits visible radiation at wavelengths greater than about 620 nm and an object-contrast spectral window; and

a frame configured to retain and situate the lens so that a wearer views through the lens with the eyewear as worn.

22. (original) The eyewear of claim 21, wherein the lens is a unitary lens and is situated by the frame so that a wearer views through the lens with both eyes with the eyewear as worn.

23. (original) The eyewear of claim 21, wherein the object-contrast spectral window corresponds to a spectrum of wavelength-converted light produced by a golf ball.

24. (original) The eyewear of claim 21, wherein the object-contrast spectral window corresponds to a spectrum of light received from an activity-specific object.

25-33. (canceled)

34. (currently amended) The eyewear of claim ~~40~~ 13, wherein the object-contrast window is a wavelength range of about 420 nm to about 520 nm.

35. (currently amended) The eyewear of claim ~~40~~ 13, wherein the background spectral window is a wavelength range of about 620 nm to about 700 nm.

36. (previously presented) The eyewear of claim 21, wherein the object-contrast spectral window is a wavelength range of from about 420 nm to about 520 nm.

37. (new) An optical filter for viewing an object, comprising an optically reflective lens having a spectral transmittance that includes an object-contrast spectral window and a background spectral window.

38. (new) The filter of claim 37, wherein the background spectral window is a wavelength range from about 620 nm to about 700 nm.

39. (new) The filter of claim 37, wherein the object-contrast spectral window is a wavelength range of from about 420 nm to 520 nm.

40. (new) The filter of claim 37, wherein the background window corresponds to at least a portion of a spectral reflectance of vegetation.

41. (new) The filter of claim 37, wherein the object-contrast window corresponds to a wavelength-conversion spectrum of light produced by the object.

42. (new) The filter of claim 41, wherein the background spectral window is a wavelength range of from about 530 nm to about 570 nm.

43. (new) The filter of claim 42, wherein the filter includes a spectral-width window.

44. (new) The filter of claim 42, wherein the spectral-width window includes wavelengths greater than about 610 nm.

45. (new) An optical filter comprising an optically reflective lens having a first spectral window selected to preferentially transmit light from an object and a second spectral window selected to preferentially transmit light from a background.

46. (new) The optical filter of claim 45, wherein the first spectral window is selected to transmit wavelength-converted light from the object.

47. (new) The optical filter of claim 45, wherein the first spectral window is selected to transmit light reflected by the object.

48. (new) Eyewear for viewing of an object with respect to a background, comprising:
a frame; and

at least one optically reflective lens configured to be placed with respect to a wearer's eyes so that the wearer looks through the lens, the lens defining a spectral transmittance having an object-contrast spectral window and a background spectral window.

49. (new) The eyewear of claim 48, wherein the background spectral window corresponds to a wavelength range in which the background is reflective.

50. (new) The eyewear of claim 48, wherein the background spectral window corresponds to a reflectance spectrum of vegetation.

51. (new) The eyewear of claim 48, wherein the object-contrast window corresponds to a spectrum of wavelength-converted light produced by the object.

52. (new) The eyewear of claim 48, wherein the lens defines a spectral-width window.